

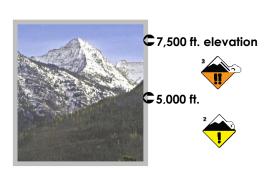
#### FOR THE GLACIER PARK AND FLATHEAD & KOOTENAI NATIONAL FOREST AREAS

Avalanche advisory does not apply to developed ski areas

Issue Date: Valid Until: Next Update: Issued by: **6:00 AM, Friday, February 24, 2012**Midnight, Friday, February 24, 2012
Tuesday, February 28, 2012
Stan Bones

This advisory is a product of the US Forest Service, US Dept. of Agriculture. Along with other snow and avalanche information, it is originally posted at <a href="http://www.fs.usda.gov/flathead">http://www.fs.usda.gov/flathead</a>. An audio summary is available via telephone at 406-257-8402

### **All Mountain Ranges**



Avalanche Danger Summary

3 -Considerable : 5,000 to 7,500 ft. elevation on steep, open slopes and gullies

2 - Mod : below 5,000

Avalanche Danger Trend



AVALANCHE – INSTABILITY
DESCRIPTION



# Danger Level 3 - CONSIDERABLE Confidence Good • Dangerous avalanche conditions

## Travel Advice Careful snowpack evaluation, cautious route-finding, and conservative decision-making essential Natural avalanche possible

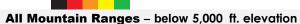
Likelihood of Avalanches	• Natural avaiantile <b>possible</b>
	<ul> <li>Human triggered avalanches likely</li> </ul>
	<ul> <li>Small avalanches in many areas</li> </ul>

- Larger avalanches in specific areas
- Very large avalanches in isolated areas

### Avalanche Size & Distribution • Concer

- Concern is steep, open slopes and gullies lacking vegetative and terrain anchors, particularly slopes with a relatively thin snow cover and a basal layer of weakly bonded, eroding, faceted grains
- Concern also with unstable near surface snow poorly bonded to buried surface hoar or layers of melt-freeze ice

### AVALANCHE – INSTABILITY DESCRIPTION



Danger Level	2 - MODERATE
Confidence	Good
Travel Advice	<ul> <li>Heightened avalanche conditions on steep, open slopes and gullies, particularly those that recently received significant new snowfall</li> <li>Evaluate snow and terrain carefully</li> </ul>
Likelihood of Avalanches	<ul> <li>Natural avalanche unlikely</li> <li>Human triggered avalanches possible</li> </ul>
Avalanche Size & Distribution	<ul><li>Small avalanches in specific areas</li><li>Larger avalanches in isolated areas</li></ul>

Because of the general nature of this advisory message, each backcountry party will always need to make their own time and site specific avalanche hazard evaluations. This advisory best describes conditions at the time of its issuance. As time passes avalanche and snow conditions may change, sometimes quite rapidly. Elevation and geographic distinctions used are approximate and transition zones between hazards exist.

Recent Mountain Weather		
<u>Summary</u>	A strong Pacific storm system swept over the region Sunday through Wednesday	
Precipitation	<ul> <li>Moist heavy snowfall in the mtns.,</li> <li>Heaviest in southern Mission and northern Swan Ranges on the Flathead Approx. 4.8- inches total of snow water equivalent over the 4-day period, Sunday to Wednesday</li> <li>Kootenai and other mtns on the Flathead saw lesser amounts New snow water equivalent amounts varied from approx. 1.5 to 3.00-inches over the four days</li> <li>Rain/Snow mix in the valleys</li> </ul>	
Temperature	<ul> <li>Temperatures mostly mild</li> <li>Tuesday and Wednesday         <ul> <li>Mountain average daily temps near 30° F</li> </ul> </li> <li>Thursday         <ul> <li>Mountain average daily temps cooled into the low 20's°F</li> </ul> </li> </ul>	
Wind	Moderate to strong winds generally from the W	

Field Observation Locations		
Thursday, 2-16-12	<ul> <li>Bear Mtn, W Cabinet Range, SW of Troy</li> <li>Doris Creek – Jenny Lake area, N Swan Range, SW of Hungry Horse</li> </ul>	
Tuesday, 2-21-12	Snowslip area of John Stevens Canyon, S'ern edge of Glacier Park, Hwy 2, west of Marias Pass	
Observer Report Locations		
	None received	

<u>Avalanches</u> <u>Observed</u>	Numerous triggered and natural slab avalanches Monday through Wednesday
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Instability Concern /	Level of	Most★★★ Less★★ Least ★
Avalanche Problem	Concern	
New Storm or Near Surface Snow	***	<ul> <li>N'erly &amp; E'erly Aspects         New snowfall has increased the loading upon the surface hoar layer developed during cold clear nights at the beginning of February     </li> <li>S'erly &amp; W'erly Aspects         New snow deposited upon melt-freeze ice crusts and layers formed during times of solar warming         </li> <li>On all aspects the recent storm surface snow layer often contains weak deposits of mostly graupel pellets</li> <li>Shear tests continue to be reactive on, in, or beneath each of these weak layers when present</li> </ul>
Wind Loading	***	<ul> <li>Recent winds have been intermittently strong, generally W'erly</li> <li>Significant cornice building along ridges and on peaks with wind loading onto leeward slopes and aspects</li> </ul>
Recent or Persistent Buried Weak Layer	***	<ul> <li>Concern with the buried surface hoar, buried melt-freeze ice crusts and buried graupel dominated layers         <ul> <li>Buried surface hoar was the failing layer in many of the natural avalanches observed in the N Swan Range and the fatal avalanche that killed there a Washington snowmobiler on Monday. This layer continued to produce collapsing and settlement whumping on Thursday</li> <li>All these weak layers when present continue to fail with little to moderate force in shear tests</li> </ul> </li> <li>Concern also remains with basal depth hoar found beneath shallow snow covers         <ul> <li>Found along the East Front and near the Continental Divide</li> <li>Also found further west on wind scoured slopes and areas like Jewel Basin where overall snowfall has been below normal</li> </ul> </li> </ul>
Spring Wet Snow or Melt-Freeze	*	<ul> <li>Not applicable currently with reestablished cloud cover</li> <li>Can occur rapidly however with even just short clearing periods following a new snowfall</li> </ul>
Rain-on-Snow		Not applicable
Loose Snow	*	Mild temperatures generally promoting surface snow consolidation
Other Concerns		

Weather Forecast Current NWS Backcountry Forecast		
<u>Summary</u>	Next Pacific storm system forecasted to impact the region beginning Friday night and through the weekend	
Precipitation	Friday daytime     Light snow showers over the high terrain     Friday night through Sunday night     New snow accumulation over the period likely to be measured in feet, not inches	
Temperature	<ul> <li>General cooling trend over the period</li> <li>Daytime temps remaining mild in the high 20's to mid 30's F</li> <li>Nighttime lows 15-25 ° F throughout the period</li> </ul>	
Wind	Moderate and generally SW'erly     Shifting to more E'erly on Sunday	

Avalanche Outlo	ook		
Trend	•Through the weekend we expect the avalanche danger to gradually increase with the new storm activity		
Concern  • Be particularly alert to new snow loading either from precipitation or upon an existing buried weak layer			
Comment	Always, always, always carry and know how to use your avalanche safety equipment Transceiver Probe Shovel Watch for any rapid changes in weather conditions beyond forecast amounts Check out the site specific snow stability before jumping in or on any slope that has the potential to avalanche Don't die doing something stupid		